



## Complete Summary

---

### TITLE

Chronic kidney disease (CKD): percentage of visits for patients aged 18 years and older with the diagnosis of advanced CKD (stage 4 or 5, not receiving RRT), with a blood pressure less than 130/80 mmHg OR blood pressure greater than or equal to 130/80 mmHg with a documented plan of care.

### SOURCE(S)

Renal Physicians Association, Physician Consortium for Performance Improvement®. Chronic kidney disease physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 32 p. [13 references]

## Measure Domain

### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of visits for patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT]), with a blood pressure less than 130/80 mmHg OR blood pressure greater than or equal to 130/80 mmHg with a documented plan of care.

### RATIONALE

Identification of hypertension in patients with chronic kidney disease (CKD) is an essential part of management of the disease. Hypertension is common in patients with CKD, and if hypertension is left untreated, it will speed the progression of the disease. Recent research has shown that during office visits, approximately 20%

to 30% of CKD patients do not have their blood pressure measured. Additionally, if the CKD patient has an anemia/erythropoiesis-stimulating agents (ESA) visit; they are even less likely to have their blood pressure measured. In these patients, recent research has shown that 75% do not have their blood pressure measured at an anemia/ESA visit. Patients with CKD should have their blood pressure measured at each office visit so that changes can be identified and treatment initiated as soon as it is necessary. Blood pressure control is important in slowing the progression of chronic kidney disease. By slowing the progression of the disease, quality of life is improved for the patient, and it results in a longer period of time before a patient requires renal replacement therapy. Patients with chronic kidney disease should have a lower target blood pressure (less than 130/80) than other patients with hypertension.\*

\*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Blood pressure should be measured at each health encounter. (National Kidney Foundation [NKF], 2004)

If a patient has glomerular filtration rates (GFR) less than or equal to 30 ml/min/1.73m<sup>2</sup>, then his/her blood pressure should be checked with every clinic visit. (Renal Physicians Association [RPA], 2002)

If a patient has a GFR less than or equal to 30 ml/min/1.73m<sup>2</sup>, and if blood pressure is determined to be elevated (systolic greater than 130 mmHg OR diastolic greater than 80 mmHg), then s/he should receive intensified antihypertensive therapy. (RPA, 2002)

Patients with CKD should be considered in the "highest-risk" group for cardiovascular disease (CVD) for implementing recommendations for pharmacological therapy, irrespective of cause of CKD. (NKF, 2004)

Target blood pressure for CVD risk reduction in CKD and diabetic/nondiabetic kidney disease should be less than 130/80 mmHg. (NKF, 2004)

## **PRIMARY CLINICAL COMPONENT**

Chronic kidney disease (CKD); blood pressure; hypertension

## **DENOMINATOR DESCRIPTION**

All visits for patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT])

## **NUMERATOR DESCRIPTION**

Patient visits with blood pressure less than 130/80 mmHg OR greater than or equal to 130/80 mmHg with a documented plan of care (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

## **Evidence Supporting the Measure**

## **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

#### **NATIONAL GUIDELINE CLEARINGHOUSE LINK**

- [K/DOQI clinical practice guidelines on hypertension and antihypertensive agents in chronic kidney disease.](#)

### **Evidence Supporting Need for the Measure**

#### **NEED FOR THE MEASURE**

Use of this measure to improve performance

#### **EVIDENCE SUPPORTING NEED FOR THE MEASURE**

Patwardhan MB, Matchar DB, Samsa GP, Haley WE. Utility of the advanced chronic kidney disease patient management tools: case studies. Am J Med Qual 2008 Mar-Apr;23(2):105-14. [PubMed](#)

### **State of Use of the Measure**

#### **STATE OF USE**

Current routine use

#### **CURRENT USE**

Internal quality improvement  
National reporting

### **Application of Measure in its Current Use**

#### **CARE SETTING**

Ambulatory Care  
Physician Group Practices/Clinics

#### **PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Physicians

#### **LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Individual Clinicians

#### **TARGET POPULATION AGE**

Age greater than or equal to 18 years

**TARGET POPULATION GENDER**

Either male or female

**STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

**Characteristics of the Primary Clinical Component**

**INCIDENCE/PREVALENCE**

Unspecified

**ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

**BURDEN OF ILLNESS**

Unspecified

**UTILIZATION**

Unspecified

**COSTS**

Unspecified

**Institute of Medicine National Healthcare Quality Report Categories**

**IOM CARE NEED**

Living with Illness

**IOM DOMAIN**

Effectiveness

**Data Collection for the Measure**

**CASE FINDING**

Users of care only

## **DESCRIPTION OF CASE FINDING**

All visits for patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT])

## **DENOMINATOR SAMPLING FRAME**

Patients associated with provider

## **DENOMINATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

All visits for patients aged 18 years and older with the diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving renal replacement therapy [RRT])

### **Exclusions**

None

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Clinical Condition  
Encounter

## **DENOMINATOR TIME WINDOW**

Time window is a single point in time

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Patient visits with blood pressure less than 130/80 mmHg OR greater than or equal to 130/80 mmHg with a documented plan of care\*

\*A documented plan of care should include one or more of the following: recheck blood pressure at specified future date; initiate or alter pharmacologic therapy; initiate or alter non-pharmacologic therapy; documented review of patient's home blood pressure log which indicates that patient's blood pressure is or is not well controlled.

If multiple blood pressure measurements are taken at a single visit, use the most recent measurement taken at that visit.

### **Exclusions**

None

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

### **NUMERATOR TIME WINDOW**

Encounter or point in time

### **DATA SOURCE**

Administrative data  
Medical record

### **LEVEL OF DETERMINATION OF QUALITY**

Individual Case

### **PRE-EXISTING INSTRUMENT USED**

Unspecified

## **Computation of the Measure**

### **SCORING**

Rate

### **INTERPRETATION OF SCORE**

Better quality is associated with a higher score

### **ALLOWANCE FOR PATIENT FACTORS**

Unspecified

### **STANDARD OF COMPARISON**

Internal time comparison

## **Evaluation of Measure Properties**

### **EXTENT OF MEASURE TESTING**

Unspecified

## Identifying Information

### ORIGINAL TITLE

Measure #1: blood pressure management.

### MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

### MEASURE SET NAME

[Chronic Kidney Disease Physician Performance Measurement Set](#)

### SUBMITTER

American Medical Association on behalf of the Renal Physicians Association and the Physician Consortium for Performance Improvement®

### DEVELOPER

Physician Consortium for Performance Improvement®  
Renal Physicians Association

### FUNDING SOURCE(S)

Unspecified

### COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

William Haley, MD (*Co-Chair*); Bonnie McCafferty, MD, MSPH (*Co-Chair*); Todd Davis, MD; Barbara Fivush, MD; Richard S. Goldman, MD; John Hartman, MD; Richard Hellman, MD, FACP, FACE; Edward Jones, MD; Craig B. Langman, MD; Cathi Martin, RD; Charles McAllister, MD, MBA, FCAP; Paul Rockswold, MD, MPH; Sam J.W. Romeo, MD, MBA; Anton C. Schoolwerth, MD, FAHA; Lesley Stevens, MD; Joseph Vassalotti, MD; Candace Walworth, MD; Don Wesson, MD; David Witte, MD, PhD, FCAP; Jerry Yee, MD

Robert Blaser, Renal Physicians Association; Dale Singer, Renal Physicians Association

Phil Renner, MBA, National Committee for Quality Assurance

Susan Nedza, MD, MBA, FACEP, Centers for Medicare & Medicaid Services;  
Desurai Wilson, Centers for Medicare & Medicaid Services

Chris Izui, Health Plan Representative (BCBS)

Elvira Ryan, RN, The Joint Commission; Ann Watts, RN, The Joint Commission

Kendra Hanley, MS, CHE, American Medical Association; Erin O. Kaleba, MPH, American Medical Association; Karen S. Kmetik, PhD, American Medical Association

Rebecca A. Kresowik, Facilitator; Timothy F. Kresowik, MD, Facilitator

## **FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

## **INCLUDED IN**

Ambulatory Care Quality Alliance  
Physician Quality Reporting Initiative

## **ADAPTATION**

Measure was not adapted from another source.

## **RELEASE DATE**

2007 Oct

## **MEASURE STATUS**

This is the current release of the measure.

## **SOURCE(S)**

Renal Physicians Association, Physician Consortium for Performance Improvement®. Chronic kidney disease physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 32 p. [13 references]

## **MEASURE AVAILABILITY**

The individual measure, "Measure #1: Blood Pressure Management," is published in the "Chronic Kidney Disease Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site:  
[www.physicianconsortium.org](http://www.physicianconsortium.org).

For further information, please contact AMA staff by e-mail at [cqi@ama-assn.org](mailto:cqi@ama-assn.org).

## **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on March 27, 2008. The information was verified by the measure developer on June 11, 2008.



## **COPYRIGHT STATEMENT**

© 2007 American Medical Association. All Rights Reserved.

CPT® Copyright 2006 American Medical Association

### **Disclaimer**

## **NQMC DISCLAIMER**

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at <http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx>.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

© 2008 National Quality Measures Clearinghouse

Date Modified: 11/10/2008

